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10/811,564

03/29/2004

Nicholas P. Clague

EL-7580

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08/21/2006

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(FORMERLY ETHYL CORPORATION)  
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EXAMINER

NGUYEN, TU MINH

ART UNIT

PAPER NUMBER

3748

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/811,564

Applicant(s)

CLAGUE ET AL.

Examiner

Tu M. Nguyen

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8-10, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 4-7 and 11-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20040329, 20060208.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 4-7 and 11-18 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claims 4 and 10, respectively. See MPEP § 608.01(n).

Accordingly, the claims 4-7 and 11-18 have not been further treated on the merits.

2. Claims 8 and 14 are objected to because of the following informalities:

- Claim 8, last line of the claim, --at least one of-- should be inserted following “blocking”; and “and/or” should read --and--.

- Claim 14, line 8 of the claim, --and-- should be inserted following “chamber;”.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 8-10, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Guinther et al. (U.S. Patent 6,821,932).

Re claims 1, 8, and 19, Guinther et al. disclose a fuel composition for two-stroke engines (lines 48-49 of column 3) and a method for controlling the deleterious effect and for improving the durability of an exhaust emissions after-treatment and control devices of at least one metal contaminant and compounds thereof in an exhaust stream from the combustion of a combustible fuel composition in a combustion system of said two-stroke engine, the method comprising the steps of:

(a) intaking said fuel composition into a combustion system of a two-stroke engine, wherein the fuel composition comprises:

- i) combustible hydrocarbonaceous liquid fuel (lines 19-20 of column 6),
- ii) lubricant comprising an oil of lubricating viscosity (lines 14-15 of column 6),
- iii) a detergent comprising an alkaline earth metal-containing compound (calcium) (line 18 of column 6), and
- iv) a molybdenum source (lines 21-22 of column 6);

(b) combusting in the combustion system the hydrocarbonaceous fuel to produce combustion products comprising at least one material (organosulfur) selected from the group consisting of alkaline earth metal and compounds thereof (see lines 57-67 of column 7 and lines 33-38 of column 8);

(c) contacting the molybdenum with at least one of the alkaline earth metal, and compounds thereof, in the combustion products (see lines 45-47 of column 8), and

(d) flowing the combustion products over at least one of a catalyst (lines 45-47 of column 6), a sensor, and an on-board diagnostic device, or a combination of these;

wherein the molybdenum interacts with at least one of the alkaline earth metal or compounds thereof effective to increase detergency, as compared to conducting the same method without including the molybdenum source in the fuel composition, and without blocking at least one of the catalyst, sensor, and on-board diagnostic device (see lines 44-54 of column 6).

Re claims 9 and 20, in the method of Guinther et al., the fuel composition is a composition according to claim 1, wherein the detergent comprises a detergent selected from the group consisting of neutral calcium sulphonate detergents and neutral calcium phenate detergents, or combinations and mixtures thereof.

Re claims 2, 3, and 10, in the fuel composition and method of Guinther et al., the detergent comprises a detergent selected from the group consisting of neutral calcium sulphonate detergents and neutral calcium phenate detergents, or combinations and mixtures thereof.

#### ***Prior Art***

5. The IDS (PTO-1449) filed on March 29, 2004 and February 8, 2006 have been considered. An initialized copy of each is attached hereto.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of seven patents: Karn (U.S. Patent 4,266,945), Davis et al. (U.S. Patent 4,740,321), Gheysens (U.S. Patent 4,973,336), Adams et al. (U.S. Patent 5,281,346), Fleischer et al. (U.S. Patent 6,200,358), Roos et al. (U.S. Patent 6,629,407), and Katafuchi (U.S. Patent 6,962,614) further disclose a state of the art.

*Communication*

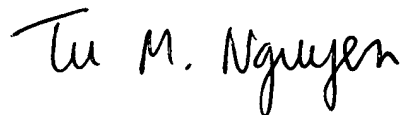
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tu Nguyen whose telephone number is (571) 272-4862.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas E. Denion, can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TMN

August 16, 2006



Tu M. Nguyen

Primary Examiner

Art Unit 3748